AMENDMENTS TO THE CLAIMS:

Please incorporate the following amendments to the subject application.

In the Claims:

1. (Currently amended) A method for directly identifying a candidate compound as ~~a compound selected from the group consisting of an inverse agonist, a partial agonist and an agonist, to~~ an **agonist or inverse agonist of an** endogenous, constitutively active G protein coupled orphan receptor, comprising the steps of:

(a) ~~contacting a candidate compound with~~ **providing a** GPCR Fusion Protein, said GPCR Fusion Protein comprising**:**

(i) an endogenous, constitutively active G protein coupled orphan receptor**;** and

(ii) a G protein; and

(b) ~~determining, by measurement of the compound efficacy at said contacted receptor, whether said compound is an inverse agonist, a partial agonist or an agonist of said receptor~~**contacting said GPCR Fusion Protein with a candidate compound;**

(c) measuring the ability of said compound to inhibit or stimulate the activity of said receptor; and

(d) identifying said compound as an agonist or an inverse agonist of said receptor, wherein said compound is identified as an agonist by stimulating the activity of said receptor, and said compound is identified as an inverse agonist by inhibiting the activity of said receptor.

2. (Original) The method of claim 1 wherein the compound is directly identified as an inverse agonist to said orphan receptor.

3. (Original) The method of claim 1 wherein the compound is directly identified as an agonist to said orphan receptor.

4. -7. (Canceled)

8. (Currently amended) The method of claim 1 wherein said orphan receptor is selected from the group consisting of: GPR3 **(SEQ ID NO:46)**, GPR4 **(SEQ ID NO:60)**, GPR6 **(SEQ ID NO:47)**, GPR12 **(SEQ ID NO:48)**, GPR21 **(SEQ ID NO:50)**, OGR1 **(SEQ ID NO:27)**, GHSR **(SEQ ID NO:45)**, RE2 **(SEQ ID NO:23)** and ALO22171 **(SEQ ID NO:49)**.

9. (Original) The method of claim 1 wherein said orphan receptor is GPR6.

10. (Original) The method of claim 1 wherein said G protein is selected from the group consisting of: Gs, Gi, Gq and Go.

11. - 19. (Canceled)

Please add the following claims:

20. (New) The method of claim 1, wherein said GPCR fusion protein is expressed in a mammalian cell.

21. (New) The method of claim 1 or 20, wherein said constitutively active G protein coupled orphan receptor is mammalian.